REMARKS

This letter is responsive to the office action dated May 2, 2003. Claims 34-54 remain in this application. Claims 34, 41, and 48 have been amended. The Applicants respectfully submit that each of claims 34-54 is in condition for allowance.

§ 112 rejections

In paragraph 3 of the office action, the Examiner has rejected claims 34, 41, and 48-54 as being indefinite.

In response, the Applicant has amended the phrase "needed simulated instruments" in claims 34, 41, and 48 with "simulated instruments not existing at the time said at least one simulation is executed" for greater clarity.

The Applicant has also amended claim 41 to clarify that the term "structure" refers to a data structure, as would be understood by persons skilled in the art. Claim 41 has been amended to clarify that the subject matter being claimed therein is a plurality of data structures that define a simulated dynamic portfolio changeable by a trade manager, and accordingly, for the purposes of this examination, these claims may be considered apparatus.

With respect to claims 48-54, the Applicant confirms that for the purposes of this examination, these claims may be considered apparatus as noted by the Examiner.

§ 101 rejections

In paragraph 5 of the office action, the Examiner has rejected claims 34-47 as non-statutory, as the method claims presented do not claim a technological basis in the body of the claim.

The Applicant has amended claim 34 to clarify that the method is computer-implemented. The Applicant has also amended claims 34 and 41 to clarify that the valuing of a simulated dynamic portfolio requires retrieving risk values from a database, and that a risk engine performs the generation of simulated instruments not existing at the time a simulation is executed. The Applicant submits that the claims as amended include at least one computer-implemented structural/functional relationship and accordingly have a technological basis.

The Applicant further submits that claim 41 as amended, which is directed to a plurality of data structures defining a simulated dynamic portfolio that comprises a plurality of simulated instruments, describes subject matter that is more than an abstract concept without physicality.

§ 103(a) rejections

In paragraph 7 of the office action, the Examiner has rejected claims 34-54 as being unpatentable over **Fr nch** in view of **Melnikoff** and **Ruffin t al.** In paragraph 8 of the office action, the Examiner states that the claims as currently presented do not preclude the method being applied by someone with little knowledge of finance.

The claims have been amended to more describe the context in which the invention is implemented. In particular, the invention is implemented as part of a risk management system. More specifically, claims 34, 41, and 48 have been amended to more clearly specify that in valuing a simulated dynamic portfolio, at least one risk value for each of one or more subsets of simulated instruments in the simulated dynamic portfolio are retrieved from a database, which comprises a plurality of values for risk factors associated with a possible future scenario and time step, and further comprises a plurality of risk values computed by evaluating one or more instrument models employing one or more of the risk factors, each of the plurality of risk values being associated with an individual simulated instrument or pre-selected group of simulated instruments. Furthermore, the amended claims further clarify that computed output risk metrics are dependent on at least one risk value stored in the database, and that any simulated instruments not existing at the time a given simulation is executed can be generated by evaluating an instrument model that employs one or more of the risk factors stored in the database. By utilizing previously calculated risk values from the database of the risk management system, dynamic portfolios can be evaluated more quickly. Support for this amendment can be found throughout the specification (e.g. p. 5 line 11 to p.6 line 1; p. 10 line 14 to p. 12 line 6). No new matter has been introduced by this amendment.

The Applicant respectfully submits that neither **French, Melnikoff**, nor **Ruffin et al.**, alone or in combination, teach or suggest the invention as claimed. For example, the cited art does not provide for the execution of a scenario-based simulation, in which a simulated dynamic portfolio is evaluated using risk values stored in a database, and where the risk values are determined by evaluating instrument models employing risk factors, which are also stored in the database (cf. Applicant's description at p. 5, lines 13-18). The cited art also does not provide that any risk values needed to produce desired output risk metrics not already in the database may be generated by evaluating generic instrument models of such instruments employing risk factors stored in the database (cf. Applicant's description at p. 11, lines 8-30).

The Applicants respectfully submit that it would not be obvious to persons of ordinary skill in the art how the teachings of the cited art might be combined to arrive at the present invention, and in particular how the systems and methods disclosed therein might be combined to execute simulations under possible future scenarios. For example, while the computation of risk values in the present invention requires the evaluation of instrument models employing risk factors, **French** does not disclose or teach the application of any valuation procedures or of financial modeling knowledge. **French** merely requires the collection of prices from the market, the trading of

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instruments based on those prices, the comparison of new market prices to old market prices after time has elapsed to calculate returns, and the evaluation of the agents' performance based on those returns.

Accordingly, the Applicants respectfully submit that independent claims 34, 41, and 48, as amended, are patentable and would not be obvious to a person skilled in the art in view of the cited art. It is further submitted that dependent claims 35-40, dependent claims 42-47, and dependent claims 49-54 which remain in the application and depend on amended independent claims 34, 41, and 48 respectfully are also patentable, for the reasons provided above with respect to the amended independent claims. Withdrawal of the Examiner's rejection is respectfully requested.

All objections and rejections have been addressed. It is respectfully submitted, therefore, that the present application is now in position for allowance, and a Notice to that effect is earnestly solicited. If the Examiner believes that a telephone interview would expedite allowance of the application, he is respectfully requested to contact the undersigned.

Respectfully submitted,

Bereskin & Parr

By _____

H. Sam Frost
Registration No. 31,696
(416) 364-7311